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ABSTRACT

Body movements and facial expressions of males and females in a restaurant setting were examined, with the goal of providing differences in frequency as a function of age and sex. The subjects (N-197 males and N=131 females) were seated in three Seattle fast food restaurants and were selected on a semi-random basis and then observed for three minutes by one female and two male observers. The behaviors observed were trunk movement, standing position, looks, glances, smiles, and laughter. Results indicated that: (1) subjects who were alone exhibited more looks than those with companions; (2) male subjects looked away from companions more than females; (3) females over age 14 with female companions showed the highest frequency of glances; (4) all female subjects smiled more than male subjects; and (5) laughter occurred more often among female subjects. (Author/HLM)

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Looking, Smiling, Laughing, and Moving in Restaurants: Sex and Age Differences

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Looking, Smiling, Laughing, and Moving in Restaurants: Sex and Age Difference

Looking, as a category of nonverbal behavior, has been investigated in a variety of contexts, but studies have largely been restricted to subjects looking at persons with whom they were interacting. Barash (1977), albeit with rather tongue-in-cheek interpretations, found a greater frequency of side-to-side looking by males before family street crossings as well as more looking around them by persons eating alone (Barash, 1972). The present study examined the frequency of both short glances and longer looks which were directed away from the objects and persons with which subjects were directly interacting.

Smiling, examined in the present study, has been assumed to be related to submission, appeasement, or nonassertiveness (Eisler, Hersen, Miller, & Blanchard, 1975), particularly with regard to the role of women in society (Frieze & Ramsey, 1976; Henley, 1977). This view is consistent with the function of similar facial expressions in primates such as the grimace of "grin" which Maxim (1976) has shown to be one of the strongest submissive behaviors in rhesus monkeys. Mackey (1976) has reported data showing that females smile more often than males when alone in a structured setting, and when greeted in a field setting. Duncan and Fiske (1977) have also found more smiling and laughing by females during conversations with strangers. The present study examined the frequency of both smiling and laughing, related, but functionally somewhat different behaviors (Lockard, Fahrenbruch, Smith, & Morgan, 1977).

In addition to smiles, laughs, glances, and looks, the present study examined gross trunk movements and standing up, with the goal of providing information on differences in frequency as a function of the age and sex of the subjects.

Method

Subjects were 197 males and 131 females seated in three Seattle fast food restaurants. Subjects were selected on a semi-random basis and observed continuously for three minutes by one female and two male observers practiced at age estimation and identification of the target behaviors.

The behaviors were: Trunk Movement, defined by a shift of the buttocks, Stand, rise to a standing position, Look away from the table and companions for longer than two seconds, Glance away from the table or companions for less than two seconds, Smile of any type defined by a turning up of the mouth corners from the subject's baseline position, and Laugh, identified primarily by chest movements.

Results

The frequencies of all behaviors were examined as a function of age and sex of subjects, and whether alone or with at least one other person. Age groupings were: under 12, 12-17, 18-22, and over 22 years of age. Table 1 shows the means and probability values derived from two way analyses of variance (Nie, et al., 1975) for all comparisons for all six behavior categories. Number of subjects in each group is shown in parentheses.

Insert Table 1 about here

A further analysis was carried out for the 127 subjects over age 14 who were with companions of only one sex and of the same age ±6 years. Means for all behaviors except movement and stand are shown in Table 2 for this second analysis.

Insert Table 1 about here

Looks of longer than 2 sec were observed significantly more often in male subjects than in females. Females who were alone, however, showed the second highest mean frequency of looks of all groups while females with companions showed the lowest frequency of looking, in interaction which was significant. Subjects who were alone exhibited significantly more looks than those with companions.

There were no significant sex differences in the frequency of glances of less than 2 sec, although females glanced more often than males, a trend opposite that for looking. Females over age 14 with female companions (Table 2) showed the highest frequency of glances of any group. The only comparison by sex in which males glanced more than females was for subjects under age 12, contributing to a sex by age interaction which approached significance.

Female subjects smiled significantly more often than males, a consistent finding in every age group. Significant age differences were also found for smiling. For both sexes combined, smiling decreased with age,

the only exception to this decrease being females 18-22 years of age who smiled more often than any other age-sex group. The overall interaction between sex and age group was significant ($p = .038$). A tendency is seen in the subjects over age 14 to smile more when with companions of the same sex, an interaction which approached significance ($p = .062$). Finally, subjects with companions smiled significantly more often than those who were alone.

Laughing was observed more frequently in female subjects in all age groups. Significant age differences were also found for laughing with frequency increasing to a high in the 12-17 age group, then decreasing through the over 22 group. A significant interaction was also found for age and sex with males showing the highest frequency in the 18-22 age group, and females showing the highest frequency in the 12-17 age group before declining. As with smiling, persons who laughed less were alone. Among subjects over age 14, males with males tended to laugh far more than males with females. Unlike the findings for smiles, however, showed a slight tendency to laugh more when with males than with females.

Significant differences were found for both movement and stand as a function of age, both differences almost entirely due to high frequencies in the youngest age group. Persons who were alone stood significantly more than those with a companion, although standing was seldom seen in any group.

Discussion

A variety of quite pronounced age and sex differences appeared in the behaviors selected for observation. While providing descriptive information

which has not been widely sought by researchers in the past was the major purpose of the study, the causes and implications of the findings are open to a variety of interpretations at this point.

Considered in the context of studies of dominance and attention structure, the lower frequency of longer looks away from companions by females could indicate more looking at companions, and hence a confirmation of the lower female rank in dominance relationships, a view which has been argued by Henley (1977) and others. Females do, in fact, look more at persons with whom they are interacting (e.g., Argyle & Ingram, 1972), at least at normal conversational distances (Aiello, 1977). Higher frequencies of glances by females, though not significant, may simply indicate the adoption of a different strategy for monitoring the environment, the result of which would be the frequently reported finding of longer total duration of looking at an interactant by females. This strategy could easily be the result of inhibitions against what might be interpreted as an "alluring gaze". More frequent looking by females who were alone argues against this interpretation, but conclusions in this area must await procedures such as those of Argyle and Graham (1976) which allow determination of the specific targets of away gaze combined with details of duration of gaze.

Significantly greater frequencies of laughing and smiling by females are consistent with previous findings (Mackey, 1976; Duncan & Fiske, 1977) and with the converging notions that both women and smiling may be considered submissive. At odds with this conclusion, however, is the finding

that more smiles are seen in females with female companions than in females with male companions. It may suffice to say at this point that the findings are consistent with the general notion that females exhibit more intimate or affiliative behavior, such as closer interaction distances (see review by Altman, 1975), than do males.

The relation of smiling and laughing to age is a general decrease in the oldest group. Further evidence for the affiliative function of smiling is derived from the high frequencies seen in 18-22 year old females, perhaps not coincidentally the peak age group for serious courtship and marriage.

References

Abramovitch, R. The relation of attention and proximity to rank in preschool children. In M. R. A. Chance and R. R. Larsen (Eds.), The social structure of attention, New York: Wiley, 1976, 153-176.

Aiello, J. R. A further look at equilibrium theory: Visual interactions as a function of interpersonal distance. Environmental psychology and nonverbal behavior, 1977, 1, 122-140.

Anderson, F. J. & Willis, F. N. Glancing at others in preschool children in relation to dominance. Psychological Record, 1976, 26, 467-472.

Argyle, M. & Graham, J. A. The central Europe experiment: Looking at persons and looking at objects. Environmental psychology and nonverbal behavior, 1976, 1, 6-16.

Argyle, M. & Ingham, R. Gaze, mutual gaze and proximity. Semiotica, 1972, 6, 32-49.

Barash, D. P. Human ethology: The snack-bar security syndrome. Psychological Reports, 1972, 31, 577-578.

Barash, D. P. Human ethology: Exchanging cheetahs for Chevrolets? Environment and Behavior.

Duncan, S. D., Jr. & Fiske, D. W. Face-to-face interactions: Research, methods, and theory. Hillsdale, N.J.: Erlbaum, 1977.

Efran, J. S. Looking for approval: Effect on visual behavior or approbation from persons differing in importance. Journal of Personality and Social Psychology, 1968, 10, 21-25.

Eisler, R. M., Hersen, M., Miller, P. M., & Blanchard, E. B. Situational determinants of assertive behaviors. Journal of Consulting and Clinical Psychology, 1975, 43, 330-340.

Exline, R. V. Visual interaction: The glances of power and preference. Nebraska symposium on motivation, 1971, 163-206.

Frieze, I. L. H. & Ramsey, S. J. Nonverbal maintenance of traditional sex roles. Journal of Social Issues, 1976, 32, 133-141.

Henley, N. Body politics: Sex, power, and nonverbal communication. Englewood Cliffs, New Jersey: Prentice-Hall, 1977.

Lockard, J. S., Fahrenbruch, C. E., Smith, J. L., & Morgan, C. J. Smiling and laughter: Different phyletic origins? Bulletin of the Psychonomic Society, 1977, 10(3), 183-186.

Mackey, W. C. Parameters of the smile as a social signal. Journal of Genetic Psychology, 1976, 129, 125-130.

Maxim, P. E. An interval scale for studying and quantifying social relations in pairs of rhesus monkeys. Journal of Experimental Psychology: General. 1976, 105, 123-147.

Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. Statistical package for the social sciences. New York: McGraw-Hill, 1975.

Footnote

[1]Reprints are available from Robert M. Adams, Department of Psychology, Fort Hays State University, Hays, Kansas 67601.

Table 1

Mean Frequencies for All Behavior Categories According to Age and Sex of Subject and Presence or Absence of Companions

	Look	Glance	Smile	Laugh	Movement	Stand
All Subjects (328)	(6.57)	(4.94)	(1.33)	(.51)	(.57)	(.11)
Male (197)	7.18	4.71	.95	.29	.50	.13
Female (131)	5.66	5.27	1.91	.83	.66	.08
p =	.003	n.s.	<.001	.003	n.s.	n.s.
Age < 12 (22)	(5.50)	(3.04)	(2.14)	(.82)	(5.36)	(.41)
Male (11)	7.36	3.73	1.82	.27	5.09	.64
Female (11)	3.64	2.36	2.45	1.36	5.64	.18
Age 12-17 (26)	(6.31)	(5.15)	(1.62)	(1.38)	(.58)	(.04)
Male (12)	7.17	3.92	1.42	.33	1.00	.00
Female (14)	5.57	6.21	1.79	2.29	.21	.07
Age 18-22 (70)	(6.53)	(5.83)	(2.24)	(.79)	(.26)	(.10)
Male (47)	6.66	5.43	1.38	.47	.26	.13
Female (23)	6.26	6.65	4.00	1.43	.26	.04
Age > 22 (210)	(6.73)	(4.81)	(.91)	(.28)	(.17)	(.09)
Male (127)	7.35	4.61	.67	.23	.15	.10
Female (83)	5.78	5.12	1.28	.35	.19	.08
p for age =	n.s.	n.s.	<.001	.002	<.001	<.001
p for interaction =	n.s.	.066	.038	.012	n.s.	.026
Alone (130)	(7.42)	(4.52)	(.22)	(.08)	(.28)	(.15)
Male (97)	7.20	4.48	.16	.07	.26	.13
Female (33)	8.09	4.61	.36	.12	.33	.18
With Companion (198)	(6.02)	(5.21)	(2.07)	(.79)	(.76)	(.09)
Male (100)	7.16	4.93	1.71	.51	.74	.13
Female (98)	4.85	5.50	2.43	1.07	.78	.05
p for companion =	.044	n.s.	<.001	.001	n.s.	.035
p for interaction =	.007	n.s.	n.s.	n.s.	n.s.	n.s.

Table 2

Mean frequencies of each behavior category as a function of sex of subject and sex of companion for subjects over age 14. Number of subjects is shown in parentheses.

	Look	Glance	Smile	Laugh
Male (68)	7.97	5.69	1.88	1.15
With Male (31)	8.62	5.50	2.53	1.94
With Female (34)	7.32	5.88	1.24	.35
Female (59)	5.17	6.12	2.56	1.03
With Male (31)	5.74	5.55	2.23	1.10
With Female (28)	4.54	6.75	2.93	.96